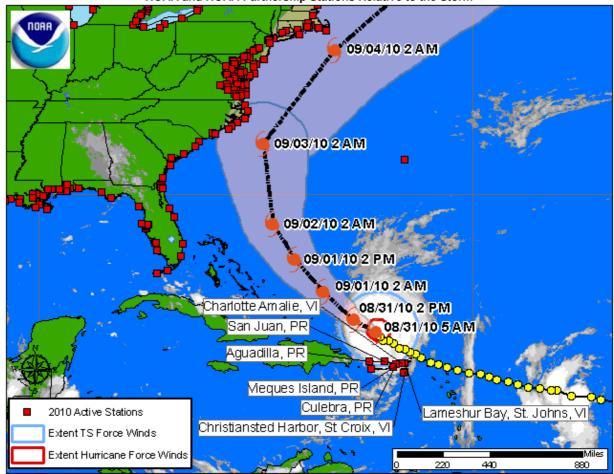


NOAA and NOAA Partnership Stations Relative to the Storm



#### **Storm Analysis**

As of 08/31/2010 06:00 AST, water levels from the U.S. Virgin Islands to Puerto Rico are subsiding and range between 0.3 and 0.8 feet above predictions. Winds are decreasing and range from 15 to 25 knots with the strongest winds still being recorded at Culebra, PR. Barometric pressure is rising across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Aguadilla, PR Next predicted high tides are 1.32 ft (0.40 m) at 08/31/2010 13:52 AST and 0.86 ft (0.26 m) at 09/01/2010 01:36 AST.

San Juan, PR Next predicted high tides are 1.62 ft (0.49 m) at  $08/31/2010\ 14:54\ AST$  and 1.06 ft (0.32 m) at  $09/01/2010\ 01:37\ AST$ .

#### Hurricane EARL QuickLook, POSTED 06:00 AST 08/31/2010

Esperanza, Vieques Island, PR: Next predicted high tides are 0.63 ft (0.19 m) at 08/31/2010 17:31 AST and 0.71 ft (0.22 m) at 09/01/2010 18:17 AST.

Culebra, PR: Next predicted high tides are 0.98 ft (0.30 m) at 08/31/2010 15:01 AST and 0.64 ft (0.19 m) at 09/01/2010 01:26 AST.

Charlotte Amalie, VI: Next predicted high tides are 0.88 ft (0.27 m) at 08/31/2010 16:12 AST and 0.95 ft (0.29 m) at 09/01/2010 17:19 AST.

Lameshur Bay, St. John, VI Next predicted high tides are 0.78 ft (0.24 m) at 08/31/2010 15:37 AST and 0.84 ft (0.25 m) at 09/01/2010 16:43 AST.

Christiansted Harbor, St. Croix, VI: Next predicted high tides are 0.66 ft (0.20 m) at 08/31/2010 14:53 AST and 0.71 ft (0.22 m) at 09/01/2010 16:45 AST.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm\_QuickLook</u> homepage.

Analyst:PFF		

#### **SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:**

**HURRICANE EARL ADVISORY NUMBER 24** 

**500 AM AST TUE AUG 31 2010** 

...EARL GETTING FARTHER FROM PUERTO RICO...CONDITIONS EXPECTED TO IMPROVE OVER PUERTO RICO AND THE VIRGIN ISLANDS TODAY...

#### **WATCHES AND WARNINGS**

\_\_\_\_\_

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* PUERTO RICO...INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES
- \* U.S. VIRGIN ISLANDS

INTERESTS FROM THE CAROLINAS NORTHWARD TO NEW ENGLAND SHOULD MONITOR THE PROGRESS OF EARL.

FOR STORM INFORMATION SPECIFIC TO PUERTO RICO AND THE U.S. VIRGIN ISLANDS...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY THE SAN JUAN NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK
--------------------------------

-----

AT 500 AM AST THE CENTER OF HURRICANE EARL WAS LOCATED NEAR ABOUT 150 MI NNW OF SAN JUAN PUERTO RICO. EARL IS MOVING TOWARD THE WEST-NORTHWEST NEAR 13 MPH. A GRADUAL TURN TOWARD THE NORTHWEST IS EXPECTED TODAY...WITH THE NORTHWESTWARD MOTION EXPECTED TO CONTINUE THROUGH WEDNESDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL MOVE AWAY FROM PUERTO AND THE VIRGIN ISLANDS THIS MORNING...AND CROSS THE OPEN ATLANTIC EAST OF THE TURKS AND CAICOS ISLANDS LATER TODAY AND TONIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 135 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY FOUR HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SOME FLUCTUATIONS IN STRENGTH ARE LIKELY OVER THE NEXT 24 TO 48 HOURS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 70 MILES FROM CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 200 MILES.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 931 MB...27.49 INCHES.

#### **HAZARDS AFFECTING LAND**

-----

WIND...TROPICAL STORM CONDITIONS WILL GRADUALLY SUBSIDE OVER THE BRITISH AND U.S. VIRGIN ISLANDS AND PUERTO RICO TODAY. STRONGER WINDS...ESPECIALLY IN GUSTS...ARE LIKELY OVER ELEVATED TERRAIN IN PUERTO RICO.

STORM SURGE...STORM SURGE FLOODING AND WAVES WILL BEGIN TO DIMINISH IN PUERTO AND THE VIRGIN ISLANDS TODAY.

RAINFALL...EARL IS EXPECTED TO PRODUCE ADDITIONAL RAINFALL ACCUMULATIONS OF 1 TO 2 INCHES ACROSS PORTIONS OF THE U. S. VIRGIN ISLANDS AND PUERTO RICO TODAY. ISOLATED MAXIMUM STORM TOTAL AMOUNTS OF 12 INCHES ARE POSSIBLE IN ASSOCIATION WITH EARL. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES.

#### **FORECASTER BEVEN**

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Aguadilla - Water Level, Aguadilla - Barometric, Aguadilla - Air/Water Temp, San Juan - Water Level, San Juan - Winds, San Juan - Barometric, Esperanza, Vieques Island - Water Level, Esperanza, Vieques Island - Winds, Esperanza, Vieques Island - Air/Water Temp, Culebra - Water Level, Culebra - Winds, Culebra - Barometric, Culebra - Air/Water Temp, Charlotte Amalie - Water Level, Charlotte Amalie - Winds, Charlotte Amalie - Barometric, Charlotte Amalie - Air/Water Temp, Lameshur Bay, St. John - Water Level, Lameshur Bay, St. John - Air/Water Temp, Christiansted Harbor, St Croix - Water Level, Christiansted Harbor, St Croix - Winds, Christiansted Harbor, St Croix - Barometric, Christiansted Harbor, St Croix - Air/Water Temp,

## Aquadilla, PR - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 9759412 Aguadilla, PR Height (Feet relative to MLLW) from 08/29/2010 06:00 - 09/01/2010 06:00 2.5 2.0 1.5 1.0 0.5 0.0 -0.5 08/29 08/30 08/30 08/31 08/31 09/01 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (AST) Predicted WL (Obs-Pred) Observed WL MHHW

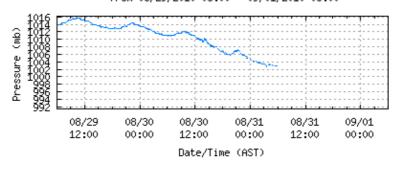
Last Observed Sample: 08/31/2010 05:48 (AST)

Relative to MLLW: Observed: 0.58 ft. Predicted: 0.02 ft. Residual: 0.56 ft.

Historical Maximum Water Level: Oct 28 2007, 0.95 ft. above MHHW

### Aquadilla, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9759412 Aguadilla, PR from 08/29/2010 06:00 - 09/01/2010 06:00

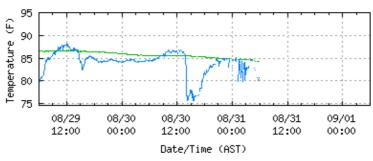


barometric pressure ———
Last Observed Sample: 08/31/2010 05:48 (AST)

**Barometric Pressure: 1002.9 mb** 

## Aquadilla, PR - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9759412 Aguadilla, PR from 08/29/2010 06:00 - 09/01/2010 06:00



Last Observed Sample: 08/31/2010 05:48 (AST)

air temp

(Obs-Pred)

water temp.

Predicted WL

Water Temperature: 84.2° F Air Temperature: 80.8° F

## San Juan, PR - Return to List

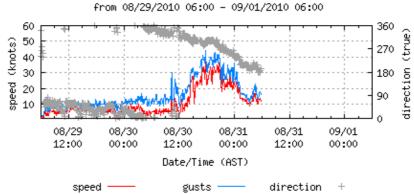
NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 9755371 San Juan, PR Height (Feet relative to MLLW) from 08/29/2010 06:00 - 09/01/2010 06:00 2.5 2.0 1.5 1.0 0.5 0.0 -0.5 08/29 08/30 08/30 08/31 08/31 09/01 12:00 12:00 00:00 12:00 00:00 00:00 Date/Time (AST)

Observed WL — MHHW — Last Observed Sample: 08/31/2010 05:48 (AST)

Relative to MLLW: Observed: 1.04 ft. Predicted: 0.20 ft. Residual: 0.84 ft. Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above MHHW

## San Juan, PR - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 9755371 San Juan, PR

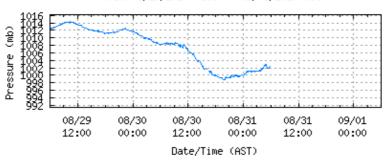


Last Observed Sample: 08/31/2010 05:48 (AST)

Wind Speed: 12 knots Gusts: 16 knots Direction: 192° T

# San Juan, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9755371 San Juan, PR from 08/29/2010 06:00 - 09/01/2010 06:00

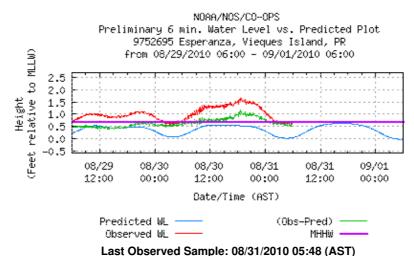


barometric pressure ----

Last Observed Sample: 08/31/2010 05:48 (AST)

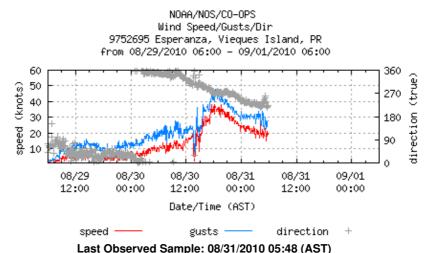
**Barometric Pressure: 1002.5 mb** 

## Esperanza, Viegues Island, PR - Return to List



Relative to MLLW: Observed: 0.61 ft. Predicted: 0.04 ft. Residual: 0.57 ft. Historical Maximum Water Level: Oct 13 2006, 0.83 ft. above MHHW

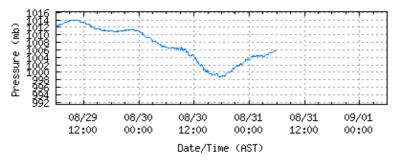
# Esperanza, Vieques Island, PR - Return to List



Wind Speed: 20 knots Gusts: 28 knots Direction: 222° T

# Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9752695 Esperanza, Vieques Island, PR from 08/29/2010 06:00 - 09/01/2010 06:00



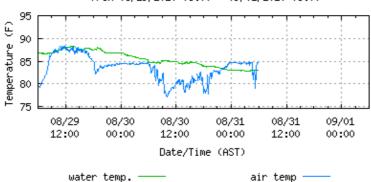
barometric pressure ——

Last Observed Sample: 08/31/2010 05:48 (AST)

Barometric Pressure: 1005.8 mb

# Esperanza, Vieques Island, PR - Return to List

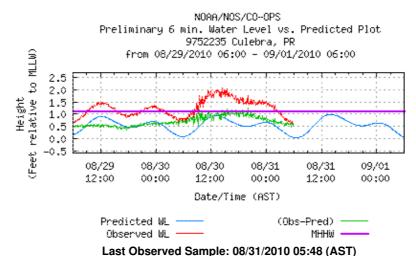
NOAA/NOS/CO-OPS Air/Water Temperature Plot 9752695 Esperanza, Vieques Island, PR from 08/29/2010 06:00 - 09/01/2010 06:00



Last Observed Sample: 08/31/2010 05:48 (AST)

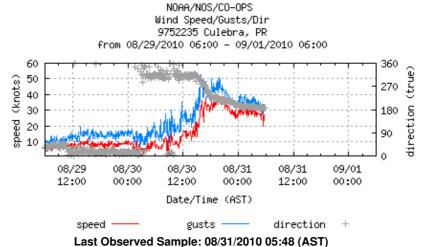
Water Temperature: 83.1° F Air Temperature: 84.6° F

# Culebra, PR - Return to List



Relative to MLLW: Observed: 0.60 ft. Predicted: 0.06 ft. Residual: 0.54 ft. Historical Maximum Water Level: Nov 6 2006, 0.86 ft. above MHHW

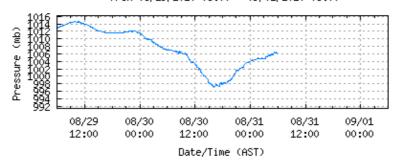
### Culebra, PR - Return to List



Wind Speed: 27 knots Gusts: 33 knots Direction: 187° T

## Culebra, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9752235 Culebra, PR from 08/29/2010 06:00 - 09/01/2010 06:00



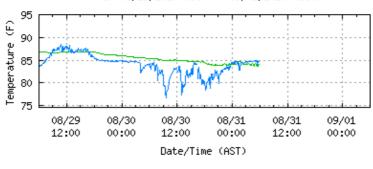
barometric pressure ——

Last Observed Sample: 08/31/2010 05:48 (AST)

Barometric Pressure: 1006.3 mb

# Culebra, PR - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9752235 Culebra, PR from 08/29/2010 06:00 - 09/01/2010 06:00

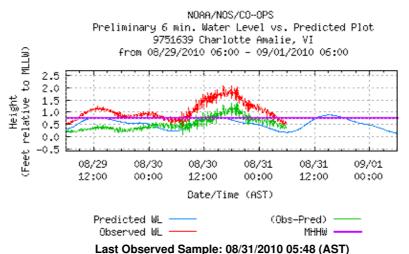


water temp. — air temp —

Last Observed Sample: 08/31/2010 05:48 (AST)

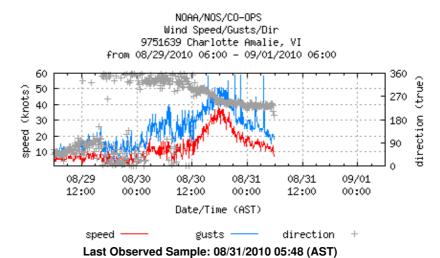
Water Temperature: 84.0° F Air Temperature: 84.7° F

## Charlotte Amalie, VI - Return to List



Relative to MLLW: Observed: 0.53 ft. Predicted: 0.17 ft. Residual: 0.36 ft. Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

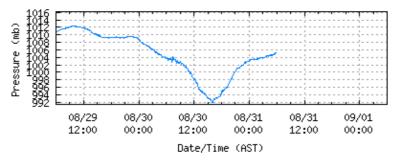
## Charlotte Amalie, VI - Return to List



Wind Speed: 7 knots Gusts: 18 knots Direction: 197 $^{\circ}$  T

## Charlotte Amalie, VI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9751639 Charlotte Amalie, VI from 08/29/2010 06:00 - 09/01/2010 06:00



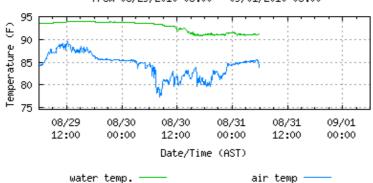
barometric pressure ——

Last Observed Sample: 08/31/2010 05:48 (AST)

Barometric Pressure: 1005.3 mb

### Charlotte Amalie, VI - Return to List

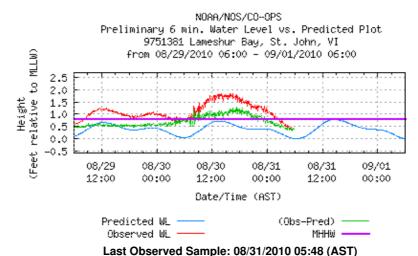
NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751639 Charlotte Amalie, VI from 08/29/2010 06:00 - 09/01/2010 06:00



Last Observed Sample: 08/31/2010 05:48 (AST)

Water Temperature: 91.2° F Air Temperature: 83.9° F

## Lameshur Bay, St. John, VI - Return to List



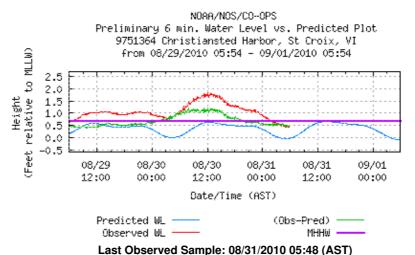
Relative to MLLW: Observed: 0.41 ft. Predicted: 0.01 ft. Residual: 0.40 ft. Historical Maximum Water Level: Nov 6 2006, 0.83 ft. above MHHW

## Lameshur Bay, St. John, VI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751381 Lameshur Bay, St. John, VI from 08/29/2010 06:00 - 09/01/2010 06:00 95 Temperature (F) 90 85 80 08/29 08/31 08/31 09/01 08/30 08/30 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (AST) water temp. air temp

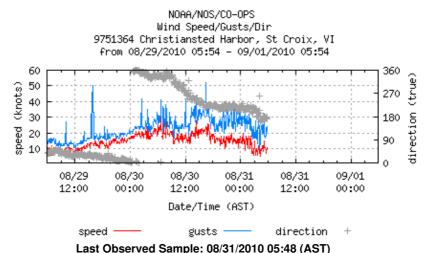
Last Observed Sample: 08/31/2010 05:48 (AST)
Water Temperature: 83.8° F Air Temperature: 83.8° F

### Christiansted Harbor, St Croix, VI - Return to List



Relative to MLLW: Observed: 0.43 ft. Predicted: -0.03 ft. Residual: 0.46 ft. Historical Maximum Water Level: Oct 13 2006, 0.73 ft. above MHHW

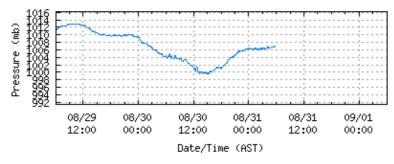
### Christiansted Harbor, St Croix, VI - Return to List



Wind Speed: 10 knots Gusts: 21 knots Direction: 180° T

## Christiansted Harbor, St Croix, VI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9751364 Christiansted Harbor, St Croix, VI from 08/29/2010 06:06 - 09/01/2010 06:06



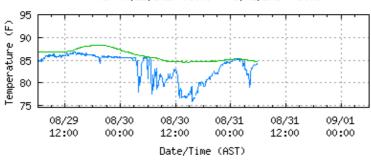
barometric pressure ——

Last Observed Sample: 08/31/2010 05:48 (AST)

**Barometric Pressure: 1007.1 mb** 

### Christiansted Harbor, St Croix, VI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751364 Christiansted Harbor, St Croix, VI from 08/29/2010 06:06 - 09/01/2010 06:06



Last Observed Sample: 08/31/2010 05:48 (AST)

air temp

water temp.

Water Temperature: 84.6° F Air Temperature: 84.2° F

# Hurricane EARL QuickLook, POSTED 06:00 AST 08/31/2010

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce